

ABSTRACT OF THE DISCLOSURE

A data processing system includes the data processing apparatuses formed with the VUPU architecture by combining a general-purpose data processing unit and a special-purpose data processing unit equipped with a data path unit for specialized data processing that is executed according to special-purpose instructions, and equipping the general-purpose data processing unit with a communication function for communicating with the general-purpose data processing unit in another data processing apparatus. In this invention, these data processing apparatuses are combined to form the system with plurality of specialized circuits, therefore, the data processing system in which parallel processing is performed by a plurality of specialized circuits can be provided economically and in a short time.